

Application No.: 10/749,960
Docket No.: HT3980USNA

Page 4

REMARKS

Reconsideration is respectfully requested of the Office rejection. In the present amendment, all claims under prosecution have been limited to a binder being a silicate. Also, claims 18 and 19 are newly added, and name the silicate as sodium silicate. Antecedent support is present for the new limitation on page 8, line 1. Claim 17 has been cancelled due to a restriction requirement, subject to filing a divisional patent application. Claims 1 to 5, 7 to 16, 18 and 19 are under prosecution.

Claims 1-4 and 6-7 have been rejected under 35 USC 102(e) as anticipated by Blankenbeckler (US 2004/0173607). In response, this publication is not applicable since a silicate binder is not disclosed.

Claims 1-2, 6 and 8 have been rejected under 35 USC 102(b) as anticipated by Pollart et al. (5,410,135). In response, this publication is not applicable since (a) a silicate binder is not disclosed, and (b) a substrate is not disclosed which meets the requirements of the base layer.

Claims 1 and 6 have been rejected under 35 USC 102(b) as anticipated by Seaborne (5,183,787). The Office rejection states:

'787 teaches a microwave susceptor material comprises a microwave absorbing material (carbon particles) and binder overlaying a nonwoven reinforcing fabric (col. 2, lines 3-7, col. 3, lines 43-52, col. 7, lines 14-25). An embodiment uses sodium silicate as the binder (col. 10, lines 36-51).

In response, applicants have been unable to find carbon particles in the disclosure of this publication. Accordingly, the request is made for citation by column and line number for this disclosure.

Secondly, applicants fail to find a nonwoven reinforcing fabric which meets the limitation (a) of claim 1. Paperboard as set forth on column 9, line 56 does not meet the requirements of all claims under prosecution.

Thirdly, the Office rejection references "sodium silicate as the binder (col. 10, lines 36-51)". It is respectfully submitted this position is in error. The wording in the publication on col. 10, lines 36-42 is:

In Fig. 5, it can bee seen that the heating patent 34 can optionally comprise a thin finish layer 36, e.g., 0.00005 to 0.001 inch (0.001 to 0.025 mm) to impart desirable surface properties, e.g., color, water repellency, smooth appearance, stick free, etc. In the simplest form, such a layer can comprise ordinary paraffin or a sodium silicate polymerized

Application No.: 10/749,960
Docket No.: HT3980USNA

Page 5

with zinc oxide. The finish layer does not substantially adversely affect the performance of the microwave susceptor.

It is pointed out that sodium silicate in a finish layer does not function as a binder for the microwave susceptor. A function of the finish layer is for use where "water repellency may be particularly desirable" (column 10, lines 50-51).

However, for completeness in this response, Seaborne does disclose use of ethyl silicate (and also "Kelvar®" (sic?) Kevlar (a para-aramid) as a ceramic binder (column 6, lines 4-56).

Claim 7 stands rejected under 35 USC 103(a) over Pollart et al. applied in an obviousness rejection to employ a continuous coating. The deficiency of Pollart has been previously discussed.

Claims 3-5 stand rejected under 35 USC 103(a) over Pollart et al. in view of Fisher et al. (US 4,892, 792). The Seaborne publication is applied to cure the deficiency of Pollart et al. for use of spunlaced or aramid fabric as use of the substrate (For purposes of information, aramid includes both para and meta forms and includes Kevlar® and Nomex).

The deficiencies of Pollart et al. have been previously discussed opposite the rejection under 35 USC 102. The application of Fisher et al. does not cure the entire deficiency of Pollart et al.

Claims 7 and 8 stand rejected under 35 USC 103(a) based on Seaborne cited to show obviousness of a continuous coating. The deficiency of Seaborne has been discussed opposite the rejection under 35 USC 103.

Claims 2-5 stand rejected under 35 USC 103(a) based on Seaborne in view of Fisher et al. The latter publication is cited to show use of "paper, spunlaced or aramid fabric" as the substrate. The combination of publications does not cure the entire deficiency of Seaborne discussed opposite the rejection under 35 USC 102.

Claims 1, 2, 6-10, 14-16 stand rejected under 35 USC 103(a) based on Shanton (US 6,066,375).

This publication is not applicable for many reasons. First, the base layer of a defined glass transition temperature or defined melting temperature does not include a paper derived from wood pulp and related cellulosic materials (note column 6, lines 17 to 32 of Shanton). Illustratively, Examples 1 and 2 of the present patent application employ aramid paper (Type 4W710 from DuPont) and Example 4 employs a para-aramid-cellulose paper. In contrast, Example 3 employs a cellulose paper only. Examples 1, 2 and 4 maintained substrate integrity during microwave susceptor/binder testing while Example 3 failed with a burned hole in susceptor.

Furthermore, Shanton does not disclose a silicate binder which the Office position acknowledges.

Application No.: 10/749,960
Docket No.: HT3980USNA

Page 6

Accordingly, the application of Shanton under 35 USC 103(a) must fail.

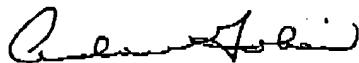
Claims 3-5 and 11-13 stand rejected under 35 USC 103(a) based on Shanton in view of Fisher et al. The deficiencies of Shanton and Fisher et al. have been previously discussed. The combination of publications does not disclose the requirements of the claims with use of a silicate binder.

In summary, the present claims under prosecution have been narrowed such that the applied rejections are not pertinent.

Reconsideration and removal of all grounds of rejection is requested.

A notice of allowance is solicited.

Respectfully submitted,



ANDREW G. GOLIAN
ATTORNEY FOR APPLICANTS
Registration No.: 25,293
Telephone: (302) 892-0747
Facsimile: (302) 892-7343

Dated: October 14, 2005